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10/776,754	02/11/2004	Lukas Eisermann	31132.227	3616
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HAYNES AND BOONE, LLP 901 MAIN ST SUITE 3100 DALLAS, TX 75202				
			EXAMINER SCHILLINGER, ANN M	
			ART UNIT 3738	PAPER NUMBER

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/776,754

Applicant(s)

EISERMANN, LUKAS

Examiner

Ann Schillinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10/16/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

The drawings were received on 10/16/06. These drawings are accepted.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-10, 13, 15-19, 21, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuslich (U.S. Pat. No. 5,591,235). Kuslich discloses the following regarding claim 1: a fusion-promoting prosthetic device for insertion into an intervertebral space, comprising a sagittally-extending plate (12) having caudal (bottom portion of 12) and cephalad (top portion of 12) edges, the caudal edge being adapted for complete insertion within a first vertebral body and the cephalad edge being adapted for complete insertion within a second vertebral body adjacent to the first vertebral body (shown in Figure 1), a first transverse plate (14, 26) connected to the sagittally-extending plate such that the sagittally-extending plate extends through the first transverse plate, and a second transverse plate (14, 26) connected to the sagittally-extending plate such that the sagittally-extending plate extends through the second transverse plate, the first and second transverse plates being adapted for complete insertion within the intervertebral space (Figures 1, 2).

Kuslich discloses the bearing surfaces on the first and the second transverse plates of claims 2 and 3 in element 16.

Kuslich discloses the following regarding claim 4: the prosthetic device of claim 1 wherein the sagittally-extending plate further comprises a plurality of openings (40) extending therethrough.

Kuslich discloses the following regarding claim 5: the prosthetic device of claim 1 wherein each of the first and second transverse plates comprises a plurality of openings (22, 24, 36) extending therethrough.

Kuslich discloses the following regarding claim 8: the prosthetic device of claim 1 wherein the first transverse plate is angled relative to the sagittally-extending plate (shown in Figure 2).

Kuslich discloses the following regarding claim 9: the prosthetic device of claim 8 wherein the second transverse plate is angled relative to the sagittally-extending plate, the angulation of the first and second transverse plates corresponding to an angular relationship defined between the first and second vertebral bodies (shown in Figure 1, especially with the two bottom elements of 26).

Kuslich discloses the following regarding claim 10: the prosthetic device of claim 1 wherein the first and second transverse plates each extend at a substantially right angle to the sagittally-extending plate (as shown in Figure 2).

Kuslich discloses the following regarding claim 13: a fusion-promoting, spinal plating assembly, comprising a first plate (12) adapted to engage a first vertebral body and a second vertebral body (shown in Figure 1), and at least one additional plate connected to the first plate such that the first plate extends through the at least one additional plate (14, 26), the at least one additional plate extending transversely to the first plate, wherein the at least one additional plate is adapted to be inserted within an intervertebral space (shown in Figures 1, 2).

Kuslich discloses the following regarding claim 15: the plating assembly of claim 13 wherein the at least one additional plate is removably connected to the first plate (col. 3, lines 56-60).

Kuslich discloses the following regarding claim 16: the plating assembly of claim 13 wherein the at least one additional plate extends at an angle relative to the first plate (as shown in Figure 2).

Kuslich discloses the following regarding claim 17: the plating assembly of claim 13 wherein the first plate is adapted to be impacted into each of the first and second vertebral bodies (col. 3, lines 50-53; col. 5, lines 3-5).

Kuslich discloses the following regarding claim 18: the plating assembly of claim 13 wherein the first plate is adapted to be inserted into a preformed opening in each of the first and second vertebral bodies (col. 5, lines 1-3).

Kuslich discloses the following regarding claim 19: a method for promoting fusion in an intervertebral space defined between first and second vertebral bodies, comprising: providing a prosthetic device having a first plate (12) adapted to engage each of the first and second (shown

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in Figure 1) vertebral bodies, and a pair of additional plates connected to the first plate (14, 26), the additional pair of plates extending in a direction transverse to the first plate and the first plate extending through each plate of the additional pair of plates (shown in Figure 1); and inserting the prosthetic device into the intervertebral space such that a first edge of the first plate is completely inserted within the first vertebral body (bottom portion of element 12 in Figure 1), a second edge of the first plate is completely inserted within the second vertebral body (shown in Figure 1, near the element labeled 14), and each of the additional pair of plates are completely disposed within the intervertebral space (shown in Figure 1).

Kuslich discloses the following regarding claim 21: the method of claim 19 wherein inserting the prosthetic device comprises impacting the first and second edges of the first plate into the first and second) vertebral bodies, respectively (col. 5, lines 1-3).

Kuslich discloses the following regarding claim 22: the method of claim 19 wherein inserting the prosthetic device comprises forming openings (54) in each of the first and second vertebral bodies and inserting the first and second edges of the first plate into the preformed openings of the first and second vertebral bodies, respectively (Figure 1).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

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skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 7, 14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuslich in view of Ferree (U.S. Pat. No. 6,432,107). Kuslich discloses the importance of bone growth for the prosthetic in col. 5, lines 31-36, but does not disclose using a promoting substance to help the growth progress. Ferree teaches the limitations of claims 6 and 7 that are coating the sagittally-extending plate and the two transverse plates with a bone-growth promoting substance in col. 4, lines 12-15. Here, Ferree says the device is coated with the bone-growth promoting substance, which the Examiner is interpreting to mean both the transverse and sagittal parts of Ferree's disclosed implant. Ferree also teaches the following regarding claim 20: the method of claim 19 further comprising inserting bone grafts into the intervertebral space (col. 2, lines 7-11). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use some kind of bone-growth promoting substance to further the progression of the healing process.

Kuslich discloses the claimed invention except for the two plates of the prosthesis being integrally formed together. Ferree teaches this feature of claim 14: the plating assembly of claim 13 wherein the at least one additional plate is integrally formed with the first plate (Figure 3C; col. 3, lines 66-67 to col. 4, lines 1-2). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the structure as one piece since integrally attaching the elements involves only routine skill in the art.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuslich in view of Jackson (U.S. Pub. No. 2002/0116065). Kuslich does not disclose altering the angles

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of the sagittal and transverse plates to a measurement other than 90° to allow the implant to better fit into the intervertebral space, but rather states in col. 4, lines 19-22 the rod may be adjusted as necessary. However, Jackson teaches this specific alteration in his intervertebral implant.

Jackson teaches the following regarding claim 11: the prosthetic device of claim 1 wherein the caudal edge is beveled at a posterior portion thereof (bottom of element 11 is not at a right angle with the vertebrae in Figure 8).

Jackson teaches the following regarding claim 12: the prosthetic device of claim 1 wherein the cephalad edge is beveled at a posterior portion thereof (top of element 11 is not at a right angle with the vertebrae in Figure 8).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to alter the transverse and/or sagittal plates of the implant so that it can fit into the desired intervertebral space.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-8, 10, and 13-22 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 2-12, 14-18, and 20-22 have been fully considered but they are not persuasive. Applicant contends that these claims are allowable because they depend on allowable independent claims. However, because the independent claims are not allowable and because of the citations given above in this office action, these claims are rejected.



*Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Schillinger whose telephone number is (571) 272-6652. The examiner can normally be reached on Mon. thru Fri. 9 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ann Schillinger  
November 6, 2006

  
**ALVIN J. STEWART**  
**PRIMARY EXAMINER**